
 CARLO GAVAZZI CARLO GAVAZZI SPACE SpA	<h1>AMS02-PDS</h1>	DOC N°: PDS-RP-CGS-061 ISSUE : 1 DATE: 23/09/2008 PAGE : 1 of 7
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INSPECTION REPORT

APPLICABLE DOC. REF. AMS02-PDS PFM Manufacturing and Inspection Plan PDS-PL-CGS-001 is. 1	PROC. REF. N.A.
ITEM INSPECTED (Name, P/N, S/N) AMS02-PDS PFM – Visual inspection of Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:01, Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:02, Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1A, Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1B – MIP.	
REQUIREMENT SATISFIED Manufacturing according to aerospace standards	
INSPECTION (Action/Results) DESCRIPTION Inspection was performed at Carlo Gavazzi Space premises starting on 23 September 2008 and was carried out on the following boards, detail of the inspected boards were below reported: 1) Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:01(pcb s/n:A1-A). 2) Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:02(pcb s/n:A1-B). 3) Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1A. 4) Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1B.	
HARDWARE REVIEW 1) Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:01(pcb s/n:A1-A), Assy:11-AMS02PDS-200.00 rev./, Parts List:11-AMS02PDS-200.01 rev.A, Electrical Scheme:11-AMS02PDS-200.02 rev./, Master PCB:11-AMS02PDS-200.03 rev./. The following NCRs were presented during the inspection: <ul style="list-style-type: none"> NCR-PDS-CGS-C-050(electronic components assembly problem), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the capacitors and resistors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. NCR-PDS-CGS-C-056(mechanical assembly problem), NCR classified "minor" is closed. NCR-PDS-CGS-C-063(terminal inductors too short), NCR classified "minor" is closed. NCR-PDS-CGS-C-065(wrong screws position), NCR classified "minor" is closed. NCR-PDS-CGS-C-067(electrical problem of U1 comparator), NCR classified "minor" is closed. NCR-PDS-CGS-C-074(electrical problem of U2 operational amplifier), NCR classified "minor" is closed. NCR-PDS-CGS-C-075(increase of input stage inrush capacitance), NCR classified "minor" is closed. NCR-PDS-CGS-C-076(missing connection on pcb), NCR classified "minor" is closed. NCR-PDS-CGS-C-077(electrical problem on input voltage telemetry circuit), NCR classified "minor" is closed. 	
Operator Signature Date	Quality Assurance C.C. <div style="text-align: center;"> <i>E. FRANCINI</i> 23/09/08 </div> <div style="text-align: center;"> <i>C. CINQUEPALMI</i> <i>C. Cinquepalmi</i> 23.09.08 </div>


 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<h1>AMS02-PDS</h1>	<p>DOC N°: PDS-RP-CGS-061</p> <p>ISSUE : 1 DATE: 23/09/2008</p> <p>PAGE : 2 of 7</p>
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<p>ITEM INSPECTED (Name, P/N, S/N)</p> <p>See page 1</p>										
<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>										
<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> NCR-PDS-CGS-C-090(reverse current out of limits), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the added resistors and reworked capacitors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. NCR-PDS-CGS-C-092(dissipation reduction of sense resistors on input current telemetry circuit), NCR classified "minor" is closed. NCR-PDS-CGS-C-100(electrical problem of current monitor circuit), NCR classified "minor" is closed. NCR-PDS-CGS-C-111(common mode filter malfunction), NCR classified "minor" is closed. <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> 11-AMS02PDS-200.01 rev A – A1 can be considered closed. 11-AMS02PDS-200.01 rev A – A2 can be considered closed. 11-AMS02PDS-200.01 rev A – A3 can be considered closed. 11-AMS02PDS-200.01 rev A – A4 can be considered closed. 11-AMS02PDS-200.01 rev A – A5 can be considered closed. 11-AMS02PDS-200.01 rev A – A6 can be considered closed. 11-AMS02PDS-200.01 rev A – A21 can be considered closed. 11-AMS02PDS-200.01 rev A – A22 can be considered closed. 11-AMS02PDS-200.01 rev A – A24 can be considered closed. 11-AMS02PDS-200.01 rev A – A25 can be considered closed. 11-AMS02PDS-200.01 rev A – A26 can be considered closed. 11-AMS02PDS-200.01 rev A – A27 can be considered closed. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p>										
<table border="1" style="width: 100%;"> <tr> <th style="width: 40%;">Operator</th> <th style="width: 40%;">Quality Assurance</th> <th style="width: 20%;">C.C.</th> </tr> <tr> <td>Signature</td> <td>E. FRANCINI</td> <td>C. CINQUEPACCHI</td> </tr> <tr> <td>Date</td> <td>23/09/08</td> <td>23.09.08</td> </tr> </table>		Operator	Quality Assurance	C.C.	Signature	E. FRANCINI	C. CINQUEPACCHI	Date	23/09/08	23.09.08
Operator	Quality Assurance	C.C.								
Signature	E. FRANCINI	C. CINQUEPACCHI								
Date	23/09/08	23.09.08								

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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <p>2) Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:02(pcb s/n:A1-B), Assy:11-AMS02PDS-200.00 rev./, Parts List:11-AMS02PDS-200.01 rev.A, Electrical Scheme:11-AMS02PDS-200.02 rev./, Master PCB:11-AMS02PDS-200.03 rev./.</p> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> • NCR-PDS-CGS-C-050(electronic components assembly problem), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the capacitors and resistors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. • NCR-PDS-CGS-C-056(mechanical assembly problem), NCR classified "minor" is closed. • NCR-PDS-CGS-C-063(terminal inductors too short), NCR classified "minor" is closed. • NCR-PDS-CGS-C-065(wrong screws position), NCR classified "minor" is closed. • NCR-PDS-CGS-C-074(electrical problem of U2 operational amplifier), NCR classified "minor" is closed. • NCR-PDS-CGS-C-075(increase of input stage inrush capacitance), NCR classified "minor" is closed. • NCR-PDS-CGS-C-076(missing connection on pcb), NCR classified "minor" is closed. • NCR-PDS-CGS-C-077(electrical problem on input voltage telemetry circuit), NCR classified "minor" is closed. • NCR-PDS-CGS-C-079(component pins damaged), NCR classified "minor" is closed. • NCR-PDS-CGS-C-092(dissipation reduction of sense resistors on input current telemetry circuit), NCR classified "minor" is closed. • NCR-PDS-CGS-C-097(reverse current out of limits), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the added resistors and reworked capacitors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. • NCR-PDS-CGS-C-100(electrical problem of current monitor circuit), NCR classified "minor" is closed. • NCR-PDS-CGS-C-111(common mode filter malfunction), NCR classified "minor" is closed. 	
Operator	Quality Assurance C.C.
<p>Signature</p> <p>Date</p>	<p style="text-align: center;">E. FRANCINI</p> <p style="text-align: center;">23/09/08 </p> <p style="text-align: right;">E. CINQUEPAINI C. Cinque 23.09.08</p>



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INSPECTION (Action/Results) The following PLVSs (Parts List Variation Sheet) were presented during the inspection: <ul style="list-style-type: none">• 11-AMS02PDS-200.01 rev A – A1 can be considered closed.• 11-AMS02PDS-200.01 rev A – A2 can be considered closed.• 11-AMS02PDS-200.01 rev A – A3 can be considered closed.• 11-AMS02PDS-200.01 rev A – A4 can be considered closed.• 11-AMS02PDS-200.01 rev A – A5 can be considered closed.• 11-AMS02PDS-200.01 rev A – A7 can be considered closed.• 11-AMS02PDS-200.01 rev A – A8 can be considered closed.• 11-AMS02PDS-200.01 rev A – A9 can be considered closed.• 11-AMS02PDS-200.01 rev A – A10 can be considered closed.• 11-AMS02PDS-200.01 rev A – A11 can be considered closed.• 11-AMS02PDS-200.01 rev A – A13 can be considered closed.• 11-AMS02PDS-200.01 rev A – A14 can be considered closed.• 11-AMS02PDS-200.01 rev A – A15 can be considered closed.• 11-AMS02PDS-200.01 rev A – A16 can be considered closed.• 11-AMS02PDS-200.01 rev A – A17 can be considered closed.• 11-AMS02PDS-200.01 rev A – A18 can be considered closed.• 11-AMS02PDS-200.01 rev A – A19 can be considered closed.• 11-AMS02PDS-200.01 rev A – A20 can be considered closed.• 11-AMS02PDS-200.01 rev A – A23 can be considered closed.• 11-AMS02PDS-200.01 rev A – A24 can be considered closed.• 11-AMS02PDS-200.01 rev A – A25 can be considered closed.• 11-AMS02PDS-200.01 rev A – A26 can be considered closed.• 11-AMS02PDS-200.01 rev A – A27 can be considered closed. The H/W has been visually inspected and is ok: no damage, visible clean is ok.			
Operator		Quality Assurance	
Signature		E. FRANCO/M	
Date		23/09/08	
		C. CINQUERATI C. Cinqu 23.09.08	

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REQUIREMENT SATISFIED See page 1	
<p>INSPECTION (Action/Results)</p> <p>3) Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1A, Assy:11-AMS02PDS-210.00 rev./, Parts List:11-AMS02PDS-210.01 rev./, Electrical Scheme:11-AMS02PDS-210.02 rev./, Master PCB:11-AMS02PDS-210.03 rev./.</p> <p>The following NCR was presented during the inspection:</p> <ul style="list-style-type: none"> NCR-PDS-CGS-C-098(mounting problem of fuses), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the fuses with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <p>4) Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1B, Assy:11-AMS02PDS-210.00 rev./, Parts List:11-AMS02PDS-210.01 rev./, Electrical Scheme:11-AMS02PDS-210.02 rev./, Master PCB:11-AMS02PDS-210.03 rev./.</p> <p>The following NCR was presented during the inspection:</p> <ul style="list-style-type: none"> NCR-PDS-CGS-C-098(mounting problem of fuses), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the fuses with adhesive EC 2216 B/A, perform a visual inspection of the previous rework. <p>The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p>	
Operator Signature Date	Quality Assurance C.C. <div style="text-align: right;"> C. CINQUEPACCHI C. Cinqu... 23.09.08 </div>



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INSPECTION (Action/Results)

CONCLUSION

As it can be evinced by the results of the visual inspection reported on previous section (HARDWARE REVIEW), no discrepancies able to impact the next foreseen activities, have been highlighted.

All solder joints are of adequate quality, the soldering process complies to ECSS-Q-70-08A and ECSS-Q-70-38A, all modifications are performed according to ECSS-Q-70-28A.

The open points are here listed :

- 1) On Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:01(pcb s/n:A1-A) the NCR-PDS-CGS-C-050(electronic components assembly problem) is still open during the inspection activity, the following corrective actions will be performed: glue the capacitors and resistors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 2) On Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:01(pcb s/n:A1-A), the NCR-PDS-CGS-C-090(reverse current out of limits) is still open during the inspection activity, the following corrective actions will be performed: glue the added resistors and reworked capacitors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 3) On Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:02(pcb s/n:A1-B) the NCR-PDS-CGS-C-050(electronic components assembly problem) is still open during the inspection activity, the following corrective actions will be performed: glue the capacitors and resistors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 4) On Input Stage Board Assy p/n:11-AMS02PDS-200.00 s/n:02(pcb s/n:A1-B) the NCR-PDS-CGS-C-097(reverse current out of limits) is still open during the inspection activity, the following corrective actions will be performed: glue the added resistors and reworked capacitors with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 5) On Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1A the NCR-PDS-CGS-C-098(mounting problem of fuses) is still open during the inspection activity, the following corrective actions will be performed: glue the fuses with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 6) On Input Stage Piggy Board Assy p/n:11-AMS02PDS-210.00 s/n:A1-1B the NCR-PDS-CGS-C-098(mounting problem of fuses) is still open during the inspection activity, the following corrective actions will be performed: glue the fuses with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.

Operator

Quality Assurance

C.C.

Signature


Date

E. FRANCONI

23/09/08

C. CINQUEPACCHI

C. Cinquepacci
23.9.8

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REQUIREMENT SATISFIED See page 1										
INSPECTION (Action/Results) From the H/W point of view the inspected boards can be used to proceed with the next activities: <ul style="list-style-type: none"> - Closing of NCR-PDS-CGS-C-050, NCR-PDS-CGS-C-090, NCR-PDS-CGS-C-097 and NCR-PDS-CGS-C-098. - Gluing of some components and threaded hardware parts. - Conformal coating. 										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%; text-align: center;">Operator</th> <th style="width: 40%; text-align: center;">Quality Assurance</th> <th style="width: 20%; text-align: center;">C.C.</th> </tr> </thead> <tbody> <tr> <td>Signature</td> <td style="text-align: center;"><i>E. FRANCINI</i></td> <td style="text-align: center;"><i>C. CINQUERALE</i></td> </tr> <tr> <td>Date</td> <td style="text-align: center;"><i>23/09/08</i></td> <td style="text-align: center;"><i>23.09.08</i></td> </tr> </tbody> </table>		Operator	Quality Assurance	C.C.	Signature	<i>E. FRANCINI</i>	<i>C. CINQUERALE</i>	Date	<i>23/09/08</i>	<i>23.09.08</i>
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